(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date 10 February 2005 (10.02.2005)

PCT

(10) International Publication Number WO 2005/012079 A1

(51) International Patent Classification⁷: B63G 8/00

B63H 21/20,

(21) International Application Number:

PCT/AU2004/001014

(22) International Filing Date: 30 July 2004 (30.07.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

2003903968 2004902116 31 July 2003 (31.07.2003) AU 21 April 2004 (21.04.2004) AU

(71) Applicant (for all designated States except US): SOLAR SAILOR PTY LTD [AU/AU]; Suite 206, "The Bentleigh", 1 Katherine Street, Chatswood, New South Wales 2067 (AU).

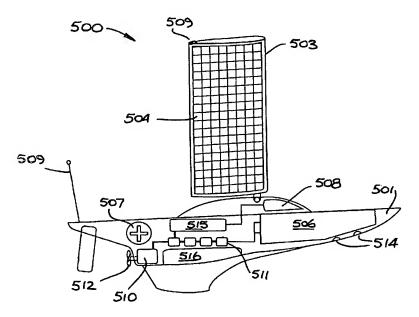
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): DANE, Robert,

A [AU/AU]; 100 Kenneth Street, Longueville, New South Wales 2066 (AU). KILBOURN, Edward, Payne [US/US]; 4504 Caledon Road, King George, Virginia 22485 (US).

- (74) Agent: PIZZEYS PATENT AND TRADE MARK AT-TORNEYS; Level 14, ANZ Centre, 324 Queen Street, Brisbane, Queensland 4000 (AU).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),

[Continued on next page]

(54) Title: UNMANNED OCEAN VEHICLE



(57) Abstract: An unmanned, autonomous, waterborne vehicle (500) for marine use capable of operating on and below the surface of water, said vehicle (500) including an enclosed hull (501) having a payload bay (506), a hybrid propulsion system having energy collection means (504) in the form of a wing sail (503) covered with photovoltaic cells and energy storage means (511) for utilising at least solar energy and wind energy, a plurality of sensors (508, 514) for detecting predetermined environmental parameters and a communications system (509, 515) for transmitting data from said sensors (508, 515) to and for receiving command signals from one or more remote stations and/or cooperating vehicles.



WO 2005/012079 A1



European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

with international search report